

Appl. No.: 09/393,060
Amndt. dated 12/13/2004
Reply to Office action of 08/13/2004

REMARKS/ARGUMENTS

Applicant would like to thank the Examiner for the thorough review of the present application. Based upon the amendments and the following remarks, Applicants respectfully request reconsideration of the present application and allowance of the pending claims.

The Present Invention

The present invention includes a method and system for selectively implementing and enforcing Authentication, Authorization and Accounting (AAA) of users accessing a network via a gateway device. According to the present invention, a user may first be authenticated to determine the identity of the user. The authentication capability of the system and method of the present invention can be based upon a user ID, computer, location, or one or more additional attributes identifying a source (e.g., a particular user, computer or location) requesting network access. *The authentication process is completely transparent to the host computer and requires no additional software be installed on the host computer in order to access the network via the gateway device.* Once authenticated, an authorization capability of the system and method of the present invention is customized based upon the identity of the source, such that sources have different access rights based upon their identity, and the content and/or destination requested. For instance, access rights permit a first source to access a particular Internet destination address, while refusing a second source access to that same address.

35 U.S.C. § 102 (b) Rejections

Claims 1-3, 6-11, 14-16 stand rejected as being anticipated by United States Patent No. 5,113,499, issued to Ankney et al. (the '499 Ankney patent).

According to the Office Action, the '499 Ankney patent teaches all of the elements of independent Claim 1, specifically:

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A method for selectively controlling and customizing source access to a network, wherein the source is associated with a source computer (**Column 1, lines 12-18**) comprising:

receiving at the gateway device a request from the source computer for access to the network, and wherein the source computer has transparent access (**Column 6, lines 28-29**) to the network (**Figure 3, Column 1, lines 7-11**) via a gateway device (**Column 5, lines 46-50**) and no configuration software need be installed on the source computer (**Column 7, lines 3-19**) to access the network, (**Column 5, lines 46-50**)

identifying an attribute associated with the source based upon a packet transmitted from the source computer and received by the gateway device (**Column 1, lines 24-27** and **Column 5, lines 46-57**);

accessing a source profile corresponding to the source and stored in a source profile database, wherein the source profile is accessed based upon the attribute, and wherein the source profile database is located external to the gateway device and in communication with the gateway device (**Figure 3, Column 5, lines 58-67** and **Column 7, lines 40-44**), and

determining the access rights of the source based upon the source profile, wherein access rights define the rights of the source to access the network (**Column 6, lines 29-32**).

The '499 Ankney Patent Does Not Teach a Source Computer that has Transparent Access to the Network via a Gateway Device

Applicant acknowledges the Examiners reference to the '499 Ankney patent at column 1, lines 18-20, which states, "The devices themselves typically are referred to as users, in the context of the network." Additionally, the applicant acknowledges the Examiners reference to the '499 Ankney patent at column 6, lines 26-29, which states "the assembly of data at the terminal (or at a PAD remote from but associated with the terminal) into a CR packet, and the intercommunication between the switch and the TAMS are transparent to the user." However, the applicant strongly believes that the Examiner has incorrectly *assumed* that the Ankney patent teaches that the devices (i.e., the source computers) have transparent access to the network. The

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Applicant strongly believes that the Examiners deductive reasoning concerning this issue is in direct conflict with the teachings of the '499 Ankney patent, *taken as a whole*.

First, the Applicant makes notes that the entire Summary of the Invention section and Detailed Description section differentiate between a user and a user's terminal (otherwise referred to as a user's data terminal equipment (DTE)). The Applicant believes that such consistent distinguishing of the terms throughout the specification is indication that the inventor's reference at column 6, line 29 to "transparent to the user" is limited to a teaching of transparency in terms of the user.

Second, *and more importantly*, the Applicant believes that the paragraph at Column 6, lines 26-47, i.e., the paragraph that includes at line 29 the term "transparent to the user" must be considered in light of the entire teaching within that paragraph. The paragraph teaches that the *assembly of data at the user's terminal into a CR packet* and the communication between the switch and the TAMS are "transparent to the user". The applicant emphasizes the term "assembly of data at the user's terminal into a CR packet" because this statement is directly in conflict with the argument that the transparency being suggested applies to the user's terminal. Assembly of the data at the user's terminal into a CR packet necessitates that a pre-assigned relationship must exist between the user's terminal and the network. Specifically, the user's terminal must support a specific protocol, i.e., call request protocol, in order to access the network. See the paragraph at beginning at Column 16, line 3, which describes the call request protocol ID in terms of X.25 or X.29 protocols. In this regard, the user's terminal that accesses the network in the '499 Ankney patent is a static device and the packet switch in the '499 Ankney patent provides static authentication, i.e., authentication is limited to authentication of the host computer that has the pre-assigned relationship. This means that in order for a user's terminal to be granted authentication, the user's terminal must support the call request protocol. Since, the '499 Ankney patent teaches a pre-assigned relationship based on pre-defined protocols, the access that is provided to the user's terminal is not, by definition, transparent access.

In the present invention, transparent access by the source computer is paramount because the gateway device is capable of providing dynamic authentication to a *source*. As defined in

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claims 1 and 10 and in the specification of the present invention the *source* is associated with the source computer. The source is not, in and of itself, the source computer. As the specification defines at page 10, beginning at line 26, "Users and computers attempting to access a network 20 or online service 22 via the gateway device 12 are referred to hereinafter as sources. According to AAA methods and systems of the present invention, a source attempting to access a network via the gateway device 12 is authenticated based on attributes associated therewith. These attributes can include the identity of a particular user or computer, location through which access is requested, requested network or destination, and the like." These attributes include the MAC address of the computer, the users password and or a VLAN tag for location identification. Thus the gateway device has the ability to grant authentication to a computer, to a user or to a location because the access is transparent to the source computer. Thus, in the present invention, the transparency to the source computer provides for the method and systems of the present invention to grant authentication to users, computers and/or locations (for example, a specific access port in a hotel room, airport kiosk or the like). The source computers that access the network do so transparently, without the need to establish a pre-assigned relationship with the gateway device or to communicate with the gateway device via a pre-assigned or defined protocol.

As to further define the term "transparent" in independent Claims 1 and 10, the claims specifically state that "no configuration software need be installed on the source computer to access the network". In this regard, the Applicant emphasizes that transparency at the host computer, i.e., user's terminal, is defined as no pre-assigned relationship with the gateway device. A pre-assigned relationship is established by modifying the host's configuration or pre-installing some agent or software on the host computer in order to access the gateway.

While the Applicant acknowledges that the '499 Ankney patent provides for secure user access to a public data network "without requiring individual customers or device manufacturers to modify their hardware or software" (Column 7, lines 17-19), modification of software is not equivalent to the need to install configuration software on the host computer. As previously discussed, the host computer in the '499 Ankney patent must support call request protocol and, thus a pre-configuration function is necessary as a precursor to implementing the protocol for

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call requests. This pre-configuration necessitates the need to install a configuration agent on the host computers.

As defined in independent Claims 1 and 10, and in the specification at the paragraph on page 14, beginning at line 18, the source computer requires no configuration software installed on the source computer to access the network. By not requiring configuration software, the source computer is able to transparently access the network. No configuration software is required because the source computers and the gateway device do not require a pre-assigned relationship. The authentication that is granted through the gateway device is by an attribute associated with the source. This attribute may be an ID of the source computer, an ID of the user or an ID of the location from which access is being sought. The fact that the user's terminal can access the gateway transparently makes the present invention highly advantageous to the user in a nomadic environment. For example, if the user is located in a hotel room, an airport kiosk or the like, the user can access the gateway and, thus, the network without having to add additional software to their terminal or without having to re-configure their terminal.

Since independent Claims 1 and 10 specifically require source computer (i.e., user terminal) transparency and that no configuration software be installed on the source computer for the purpose of accessing the network and the '499 Ankney patent requires the host computers to be dually configured to support call request record/protocol, applicant respectfully submits that for this reason independent Claims 1 and 10, which have been rejected under 35 U.S.C. § 102 (b) are not anticipated by the cited '499 Ankney reference and, are thus, patentable.

In addition, the dependent Claims that depend from Claims 1, 10, specifically Claims 2-9 and 11-16 add further limitations to the independent claims and, as such, as a matter of law, if the independent claims are found patentable so too should the accompanying dependent claims.

According to the Office Action, the '499 Ankney patent teaches all of the elements of independent Claim 10, specifically:

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A system for selectively controlling and customizing access, to a network, by a source, where the source is associated with a source computer, and wherein the source computer has transparent access to the network via a gateway device and no configuration software need be installed on the source computer to access the network, comprising:

a gateway device (**Column 5, lines 46-47**), wherein the gateway device receives a request from the source for access to the network (**Column 5, lines 46-50**);

a source profile database in communication with the gateway device and located external to the gateway device (**Figure 3**), wherein the source profile database stores access information identifiable by an attribute associated with the source, and wherein the attribute is identified based upon a data packet transmitted from the source computer and received by the gateway device (**Column 5, lines 58-67** and **Column 7, lines 40-44**), and

an Authentication, Authorization and Accounting (AAA) server in communication with the gateway device and source profile database, wherein the AAA server determines if the source is entitled to access the network based upon the access information stored within the source profile database, and wherein the AAA server determines the access rights of the source, wherein access rights define the rights of the source to access destination sites via the network (**Figures 8-10, Column 5, lines 7-16, 58-67** and **Column 7, lines 20-27, 40-44**).

The '499 Ankney Patent Does Not Teach or Suggest Accounting as a Required Function of the Total Access Management System (TAMS)

The TAMS system taught in the '499 Ankney patent teaches a system for authenticating and authorizing users and host computers for access to a public data network. The TAMS system does not teach or suggest an accounting means. To the applicant's knowledge, the TAMS system taught in the '499 Ankney patent does not provide for an accounting protocol between the packet switch and the TAMS server.

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Claim 10 of the present invention specifically lists as an element an Authentication, Authorization and Accounting (AAA) server. This server must, by its very nature, support and provide an accounting function, generally TCP/IP accounting.

Since independent Claim 10 specifically requires a AAA server capable of providing accounting functions and the '499 Ankney patent provides no teaching that the TAMS provides such functionality, applicant respectfully submits that for this additional reason independent Claim 10, which has been rejected under 35 U.S.C. § 102 (b) is not anticipated by the cited '499 Ankney reference and, is thus, patentable.

Further, as mentioned above, the dependent Claims that depend from Claim 10, specifically Claims 11-16 add further limitations to the independent claims and, as such, as a matter of law, if the independent claims are found patentable so too should the accompanying dependent claims.

35 U.S.C. § 103 (a) Rejections

Claims 17 and 20-24 stand rejected as being unpatentable over United States Patent No. 5,113,499, issued to Ankney et al. (the '499 Ankney patent) in view of United States patent No. 6,317790, issued to Bowker et al. (the '790 Bowker patent).

According to the Office Action, the '499 Ankney patent in combination with the '790 Bowker patent teach all of the elements of independent Claim 17.

The '499 Ankney Patent nor '790 Bowker Patent Teach a Gateway Device that Enables the Source to Communicate with a Network Without Requiring the Source Computer to Include Network Software Configured for the Network

Similar to the arguments present to distinguish the '499 Ankney patent from independent Claims 1 and 10, independent Claim 17 requires the gateway to enable the source to

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communicate with a network without requiring the source computer to include network software configured for the network. Neither the '499 Ankney patent nor the '790 Bowker patent provide for a gateway device that enables the source to communicate with a network without requiring the source computer to include network software configured for the network.

As previously noted, the '499 Ankney patent requires support of call request protocol in order for the source computer to access the network. Such support of the CR protocol necessitates that the source computer include network software, i.e. CR protocol software, to access the network. The '790 Bowker patent teaches redirection at a Web server and does not teach or suggest the use of a gateway device that provides network access.

Since independent Claim 17 specifically requires the gateway to enable the source to communicate with a network without requiring the source computer to include network software configured for the network and the '499 Ankney patent and '790 Bowker patent provide no teaching of such, applicant respectfully submits that for this reason independent Claim 17, which has been rejected under 35 U.S.C. § 103 (a) is not unpatentable over the '499 Ankney reference in view of the '799 Bowker patent and, is thus, patentable.

Further, as mentioned above, the dependent Claims that depend from Claim 17, specifically Claims 18-24 add further limitations to the independent claims and, as such, as a matter of law, if the independent claims are found patentable so too should the accompanying dependent claims.

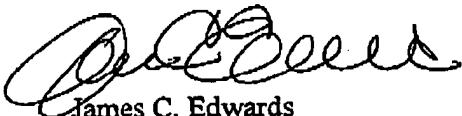
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Conclusion

In view of the proposed amended claims and the remarks submitted above, it is respectfully submitted that the present claims are in condition for immediate allowance. It is therefore respectfully requested that a Notice of Allowance be issued. The Examiner is encouraged to contact Applicant's undersigned attorney to resolve any remaining issues in order to expedite examination of the present invention.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

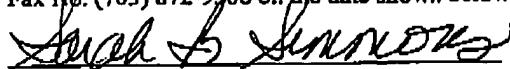


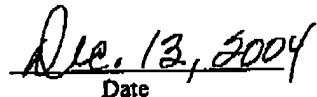
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